
**BRIEF PROPOSAL FOR 3MW WIND
POWER PROJECT UNDER ACTIVITIES
IMPLEMENTED JOINTLY (AIJ)**

IN JAMGODHRANI, DEWAS DIST.

MADHYA PRADESH, INDIA

USIJI Project Proposal

AVANTI FINANCE LIMITED

I.	Project participants	V
A.	Domestic Participant.....	V
B.	Foreign Participant	V
II.	Project Information	VI
A.	Description of milestones	VI
1.	Brief summary of the project.....	VI
2.	Project Location	VII
3.	Dates of significant milestones.....	IX
B.	Project Funding	IX
D.	Additionality	X
	Program Additionality.....	X
	Financial Additionality.....	X
	Emissions Additionality	X
E.	Acceptance by Federal Government of the Host Country	XI
F.	Technical Assistance.....	XI
III.	Greenhouse Gas Emission and Sequestration	XI
A.	Estimates of emissions and/or sequestration of Greenhouse Gases without measures.....	XI
B.	Estimates of emissions and sequestration of Greenhouse Gases with measures	XII
C.	Monitoring Greenhouse Gas emission updating emission estimates.....	XIII
1.	Monitoring Process	XIII
2.	Baselines and project projections	XIII
D.	External Verification.....	XIII
IV.	Other Considerations.....	XIV
C.	Other information.....	XIV
1.	Project Need	XIV
2.	Technology.....	XIV
3.	Project Management.....	XV
4.	Benefits	XV
V.	Annexure - I.....	XVII
	Capability Statement.....	XVII
	Financial Performance of the company:.....	XVIII
	Capital Costs	XIX

I. Project participants

A. *Domestic Participant*

Organization:

Location:

Responsible:

Address:

Eligibility:

B. *Foreign Participant*

Organization: Avanti Finance Limited

Location: Indore, Madhya Pradesh, India

Responsible: Mr. Ramnik Singh

Address: 170/10 Film Colony

R.N.T. Marg

Indore – 452001

India

Tel. 11-91-731-270829, 11-91-731-469639

Fax. 11-91-731-475867

E-Mail: powercom@bom4.vsnl.net.in

Eligibility: Registered financial and project development
company

II. Project Information

A. *Description of milestones*

1. Brief summary of the project

The energy sector worldwide far outnumbers other sources that produces maximum emissions in our atmosphere. In our very small way we propose to develop a 3 MW wind project which has no emissions of GHGs. The project would be developed by Avanti Finance Limited. Avanti Finance Limited represents a leading industrial house in Madhya Pradesh (See capability statement in the Annexure). The proposed project is necessary to bring the wind energy generation technology to the next level. Tata Energy Research Institute (TERI) is associated as an external consultant. The work is undertaken under the TREAT (TERI's Repository of Environmental Activities and Technologies) programme which builds awareness about cost-effective options to reduce GHG emissions among Indian industry. TERI is the largest environmental institute in the world. Most of TERI's activities are focussed on conducting policy research on sustainable use of resources. It would also help test the waters of potential for AIJ/CDM projects in the Indian energy sector.

The Objectives of proposing this project are to take advantage of superior technology that would have been unavailable outside of the AIJ/CDM mechanism. The facts to justify the project are many, among the most important is that there is no emission from the power generation, hence it will abate over 250 hundred thousand mt of direct emissions.

There are no existing 3 MW wind power projects in India. Madhya Pradesh is dependent on thermal power to meet current energy demands. It is essential for the project to qualify under AIJ/CDM because of the risks involved. This is a proposal for a pilot project under Activities Implemented Jointly (AIJ) and/or Clean Development Mechanism in the (UNFCCC) United Nations Framework Convention on Climate Change. The project will provide opportunities for capacity building by offering training

to local staff.

2. Project Location

The site for the project is Jamgodhrani in Madhya Pradesh. Jamgodh Hills in village Jamgodhrani, District Dewas has been identified by Ministry of Non-Conventional Energy Sources (MINES), Government of India as a commercially exploitable location for wind power generation. Jamgodhrani already has operational wind energy generating. The capacity of Avanti Finance Ltd.'s 3 MW would be met by using two Tacke 1.5S turbines. Allotment of land for the wind farm has been received. In spite of being situated in an inland location, the site has shown a steady wind pattern with not much variation and an extremely positive power law index.

The initial estimate for commercially viable wind power generation in India was to the tune of 20,000 MW, Jamgod Hills and Madhya Pradesh has an identified and demonstrated exploitable capacity to the tune of approximately 200 MW, with Jamgod Hills accounting for over 25% of this estimate.

2a. Site Summary

Power generated from the wind farm would be captive. The Ruchi Group would utilize the power to replace diesel generators in the nearby factory. The estimated annual output of power would be 7 million kWh. In Madhya Pradesh, where the proposed site is located has been facing growing problems of granting escrow covers to IPPs. Lack of financial resources has effected capacity additions. For a comparative analysis between power generation from wind to fossil fuel based power generation, please refer to the calculations in the annexure (Wind_cflw.xls calculates wind and thermal_calc provides the financial working of the project and cash flows for thermal power generation in India). Avanti has entered into long-term understanding and power purchase agreement with National Steel Limited and Madhya Pradesh Glychem. Together these companies

consume over 30 million kWh of power annually.

The site proposed for the 3 MW wind farm is situated close to the "Janoli & Rabadiya" villages. A PWD road approaches the site from Siyapur at a distance of 9 Km from the industrial township of Dewas. As per the survey of India map – Part Plan, Sheet No55 A/4 & 55 B/1, the location of the site is as follows:

Longitude 76 Degrees, 11 Minutes

Latitude 23 Degrees, 1 Minutes

The MNES, in close co-ordination with the Institute of Tropical Meteorology, Bangalore, has identified the potential of this site. The Institute and Ministry have taken out 4 volumes of publication containing detailed data and wind characteristic of all the potential sites in India.

The site has recorded an average wind speed of 18.41 Km/h (5.11 m/s) at 20 meter hub height. The percentage frequency distribution (hours per year at a particular wind range) of the site also supports the data and shows a very good and evenly spread wind over various wind speeds. Over 35% of the total hour's fall and witness wind speed over 7 m/s, which is a very good range. The same data when interpolated to 85 meter hub height, it has 23% annual hourly wind velocity falling over between 5 m/s and 7 m/s and 29% falling between 7 m/s and 10 m/s. and close to 20.50% falling over 10 m/s. Contour mapping is critical, as positioning of wind turbines is extremely important so as to minimise the shadow effect and also to reduce material costs and installation expenses such as cables etc.

On the basis of the wind frequency and the power law index data the wind power output from the wind farm has been calculated from the certified wind power output

curve of the wind turbine. The estimate of power output will be made available in the next phase.

The company proposes to transmit the power from the wind farm to the MPEB grid via a 33 KV transformer station already existing near the Lakshmi Solvex grid. The Sub-station is located approximately 8 Km west of the wind farm site.

3. Dates of significant milestones

L.O.A From Mpuvn For Installing Wind Farm	Received
Permission From MPEB For Setting Up Wind Farm	Applied For
Permission from Pollution Control Board	N.A
Allotment of Land For Wind Farm	Received
Possession of Land	Applied For
Signing Power Purchase Agreement	Complete
Ordering Plant and Machinery	Jun 2000
Financial Closure	Jul 2000
Delivery Of Turbines	Oct/Nov 2000
Erection and Commissioning	Dec/Jan 2000
Commercial Power Production	Jan/Mar 2001

B. Project Funding

The structuring of the project does not make it viable for competitive financing from within India for the project cost. IREDA (Indian Renewable Energy Development Agency) loans could make the project economically unviable. Instead a leasing option would be more practicable since the developer is part of a consortium. As such financial support from AIJ/CDM/country program grants would help the project in taking off (refer to financial calculations in the annexure). International utility companies/consortiums would also be good potential funding sources since they

are getting organized to take advantage of innovative projects like this one.

D. Additionality

Coal has been used for all CO₂ abatement calculations as the project is in the state of Madhya Pradesh (MP). As has been stated above, MP predominantly uses coal to meet power generation requirements. In the baseline calculations we have taken the Least Cost/Incremental Cost (see annexure II), depending on the final financial arrangement for this project the cost of carbon abated could range from US\$ 6/ton as we have found to \$15.

Program Additionality

By using technology that is much more advanced than what is presently being used in wind power generation in India this project is at the forefront of utilizing newer and more efficient technology. Further inherent in its nature is a capacity building component because it uses the most advanced technology that is available for already existing wind generation capabilities in India.

Financial Additionality

As stated above, funding for this project has to come from AIJ/CDM programmes because it would be considerably harder to qualify under other domestic/multilateral funding agencies under climate change. The jump to a much better technology, i.e. from 750 kW, which is the norm to 1.5 MW is substantially additional to existing wind turbines in operation. With an additional capital expenditure of 20% the Tacke turbines generate up to 65% more power.

Emissions Additionality

In the context of climate change, the power sector is the largest

sources of greenhouse gas emission in India. This project will implement a 3 MW wind power project, which will produce approximately 7 million kWh of clean - 100% pollution free power. The state suffers from chronic transmission loss problem, with the transmission losses at close to 21%, and average plant load factor of 56% the amount of power produced from the wind power plant will be equivalent to 8.4 million kWh generated at the power plant. An economic analysis indicates that the project will provide significant benefits to both the consumers of power and the state. In addition, the project is expected to result in reduction in carbon output of approximately 7000T of carbon per year with approximately 175,000 T of carbon abatement in the project lifetime.

E. Acceptance by Federal Government of the Host Country

Initial contact has been made with the host country approving ministries, and final clearance would be conditional on the approval of the project proposal.

F. Technical Assistance

Investors from the United States are being actively sought. Assistance from USIJI in identifying the potential investors is requested.

III. Greenhouse Gas Emission and Sequestration

A. Estimates of emissions and/or sequestration of Greenhouse Gases without measures

The transmission and distribution of electricity system in India suffers from large losses. For the state utility to transmit a total of 7 million kWh, with transmission losses at over 20 percent it would be required to generate 8.7 million kWh taking into account the abatement of CO₂ for the power produced and transmission losses. The savings over the lifetime of the project are as follows:

8,700,000 kWh: 11,310 MT of CO₂ per year or
282,750 MT of CO₂ over the project life time
8,700,000 kWh: 2.1315 MT of CO per year or
53.2875 MT of CO over the project life time
8,700,000 kWh: 11.31 MT of NO_x per year or
282.75 MT of NO_x over the project life time
Abatement of total direct emissions: 283,086.0375 MT

B. Estimates of emissions and sequestration of Greenhouse Gases with measures

Every kilowatt-hour of power produced by a wind turbine offsets emission up to 1 kg of carbon dioxide from conventional sources. It also offsets up to 7 grams of sulphur oxides, nitrogen oxides and particulates from fuel cycle of coal, including mining and transport, 200 grams per kilowatt-hour of solid waste from coal tailings and ash. Effectively promoting wind energy would reduce global emissions of carbon dioxide by more than 10 billion metric tons.

Reduction of GHG per kWh generated by wind power.

1 kWh from wind power: 1.3 kg of CO₂
1 kWh from wind power: 0.000245 kg of CO
1 kWh from wind power: 0.0013 kg of NO_x
1 kWh from wind power: 0.200 kg of solid waste from coal tailings and ash

Total savings from the proposed project will be as follows:

7,000,000 kWh: 9,100 MT of CO₂ per year or
227,500 MT of CO₂ over the project lifetime
7,000,000 kWh: 1.715 MT of CO per year or
42.875 MT of CO over the project lifetime
7,000,000kWh: 9.1 MT of NO_x per year or

227.5 MT of NO_x over the project lifetime

Abatement of total direct emissions: 227,770.375 MT

C. *Monitoring Greenhouse Gas emission updating emission estimates*

1. *Monitoring Process*

TERI (Tata Energy Research Institute) will be responsible for monitoring GHG emissions on a bi-annual basis. TERI has some of the leading experts in India working in the wind energy sector. TERI has used GIS and satellite imagery to study the area and the wind generation capabilities. Power generation would be closely monitored on-site using state-of-the-art equipment. Similar other monitoring exercises are regularly undertaken by TERI. Each year a report monitoring progress and tracking benefits would be submitted to the host country government and investing party. Extensive monitoring would help ensure that performance of the machines and electricity generation is at par with what is required. Simulations using advanced software have demonstrated that monitoring results could be undertaken routinely. A schedule for conducting monitoring and verification would be agreed upon during the project signing stage. Trained experts from independent third parties with a number of years of field experience would serve as consultants and provide much-needed feedback to the project.

2. *Baselines and project projections*

Data from the site would be used to periodically update baselines and GHG emission projections.

D. *External Verification*

Final modalities of the external verification can be determined jointly with USIJI at a later date. Internationally acceptable procedures and methodologies would also be

followed.

IV. Other Considerations

C. Other information

1. Project Need

Wind energy is expected to reach over one million in installed capacity by the early part of next century. It will generate three trillion kilowatt-hour (kWh) of electricity yearly. It is envisaged that up to a fifth of total energy demand would be met by wind in the year 2020. World's total potential is 53 trillion kWh. Traditional sources of energy based on fossil fuels have finite reserves. Renewable sources will become prevalent breakthroughs in research and developments in lightweight materials, aerodynamics and electronics. Wind generation also offsets up to 7 grams (0.015 pounds) per kilowatt- hour of sulfur oxides, nitrogen oxides and particulates from the fuel cycle for coal, including mining and transport. It also offsets 0.1 gram (0.468 pounds) per kilowatt-hour of trace metals, such as mercury and more than 200 grams (0.5 pound) per kilowatt-hour of solid wastes from coal tailings and ash.

The state of Madhya Pradesh is currently meeting over 85% of its entire power requirement from thermal energy sources, using extremely high ash coal, low in calorific value and low sulphur content.

2. Technology

Wind energy technology is one of the fastest growing in the world. The cost of generating wind energy would progressively decline from the present ones. Present energy generation from wind powered turbines is 13,000 MW globally. The Tacke 1.5s

turbine is one of the largest and most economical wind turbines available in the market. It has a very high power output per kW installed as well as low capital cost per kW produced. It is with an aim to optimise the land resource and at the same time maximise the power output that Avanti decided to opt for wind turbines of larger wind capacity at high hub height. This will not only give a more steady wind stream to convert into power but also reduce the wind farms array losses, due to shadowing and turbulence created by the adjoining wind turbines.

3. Project Management

Under the contract agreed to between Tache (technology provider) and Avanti Finance (host party), a team from the technology provider would be based on-site to provide as needed technical assistance and on-the-job training. The host party would have qualified staff located on-site round the clock for regular O&M work.

4. Benefits

Avanti proposes to utilize the most advanced wind power generation technology manufactured by Tacke Windenergie GmbH. The 1.5S turbines with a capacity of 1500Kw are industry leaders in that category. This technology transfer and know how is environmentally friendly.

Global: This project will cost-effectively provide global benefits by reducing GHG emissions. The capital cost of the project is low at Rs. 23.21 per kWh produced and the cost per ton of CO₂ abated is US \$6 for the project (see incremental cost calculation in annexure).

National: There will be local capacity building by effectively demonstrating operational

capabilities. Long-term benefits include popularizing wind power as a viable option for power generation. In addition to local benefit, wind power in India has normally been produced using smaller turbines, which actually result in using large areas of potential wind farms per kWh installed. In addition larger turbines are not only more efficient with respect to land use but they are also produce more power.

V. Annexure - I

Capability Statement

Avanti Finance Ltd. was incorporated in 1985 as Patel Leasing and Finance Private Limited. The name was changed to Avanti Finance Limited in 1992 and made a public limited company. Main activities of the company include short-term money market operations, registrar and share transfer agent for companies. The net income from operations for the 1997-98 was Rs. 851.26 Lakhs.

The company was initially engaged in fund based activities, like investment in equity shares of listed companies and well know public limited companies. Thereafter the company had diversified into short term money market operations like inter-corporate deposits, short term and unsecured loans etc. With the crash in stock market in mid-90s and the crisis in financial market the company quickly responded to change and diversified into other areas, i.e. registrar and share transfer agent. Today the company is a reputed registrar and share transfer agent, registered with SEBI and is serving as a share transfer agent of some very reputed companies in Central India, viz.:

1. Ruchi Soya Industries Ltd.
2. Madhya Pradesh Glychem Industries Limited.
3. National Steel Industries Limited
4. Ruchi Strips & Alloys Limited
5. Avanti (LPG) India Limited.

The group turnover for 1997-98 was over Rs 26.00 billion (USD \$600 million), the group's net worth is over Rs 3.75 billion (USD \$80 million). A measure of public confidence in the group is demonstrated by over 150,000 shareholders across the country.

Ruchi Group is a well-known family owned medium sized industrial group based in

Madhya Pradesh. Its various manufacturing units are dotting the industrial map of Central India. The group has its corporate headquarters at Indore, with other important offices in Bombay, New Delhi and Calcutta and regional offices in other cosmopolitan cities in India. Plans are afoot to open offices in the UK, as special thrust is being given to international trade.

The group's business interests vary. It has manufacturing and trading facilities of Soya bean products, agri business, oils and fats, flat steel, galvanised steel and cold rolled steel sheets etc. The group also has a long exposure in trading of oil seeds and other agricultural crops. The combined business turnover for the year ending 1997-98 stood at USD \$650 million. The export has gone up significantly and it has achieved an export turnover of Rs 450 crores during the same period. Exports consist of Soya based food products, DOC (De-Oiled Cake), Oil, Cold Rolled Coils/Sheets and Galvanised Steel Sheets/Coils.

The company had diversified its operations into trading. Belonging to a well diversified and multi commodity group, Avanti Finance has decided to enter renewable energy power generation activities and has proposed a 3 MW wind power project in the central Indian state of MP.

Financial Performance of the company:

S.NO	PARTICULARS	1995-96 (Audited)	1996-97 (Audited)	1997-98 (Audited)	1998-99 (Unaudited)
1	Net Sales/Income from operations	685.25	285.97	851.26	-
2	Other income	58.91	47.33	39.13	20.65
3	Total Expenditure	723.70	292.97	856.41	13.75
4	Interest	-	19.16	11.99	-
5	Profit after interest but before depreciation and taxes	20.46	21.18	21.99	6.90
6	Depreciation	2.09	2.70	2.77	2.75
7	Provision for Taxation	0.50	2.50	0.25	-
8	Corporate Dividend tax	-	1.50	-	-
9	Net Profit (5-6-7-8)	17.87	14.48	18.97	4.15
10	Paid up Equity Share Capital	300.00	300.00	300.00	300.00
11	Reserves	14.72	14.21	32.81	-

Capital Costs

S.No.	Description	Sub Total	Total (Rs. Lakhs)
1	<u>Civil Costs</u>		
	* Land development	7.00	
	* Roads	54.00	
	* Turbine foundations	90.00	
	* Transformer foundations	4.50	
	* Control rooms	2.75	
	* Wire fencing	1.00	
	* Water supply	1.50	
	* Store room	4.25	
			165.00
2	<u>Electrical Costs</u>		
	* Control & metering station Switchgear Protection and misc. equipment	16.25	
	* Transformers	52.50	
	* 33 KV overhead line internal, 33 KV extension line from state electri- city grid	58.00	
			127.25
3	<u>Wind Turbine Costs</u>		
	* Wind turbines 1500 kw (2 nos. * 595 Lakhs each)	1190.00	
	* Erection & commissioning	110.50	
	* Spares at site	10.00	
	* Office equipment	6.30	
			1316.80
4	* Margin Money for Working Capital		10.00
	<u>Total Capital Cost</u>		<u>1618.55</u>

The total capital cost of the project works out to Rs 162.4 million. This includes

margin money for working capital for the first year of production. The summary of the project cost is given below:

S.No.	Details	Amount
1	Land & site development	61.00
2	Foundations/Store/Buildings	104.00
3	Plant & Machinery including erection & Spares	1316.30
4	Electrical/transformers & transmission Lines	127.25
5	Misc. Fixed assets & equipment	6.30
6	Margin money for working capital	10.00
	Total	<hr/> 1624.55

Capital Structuring:

Lease Finance	805.00
Participation through AIJ/CDM	575.00
Promoters Contribution	244.55
Total	<hr/> 1624.55

NPV of equivalent wind farm (210 MW)	13229905640
NPV of equivalent TPS (210 MW)	10121849246
NPV-CO2 (Wind)	0
NPV-CO2 (TPS)	11769931.53
Rs/ton of CO2	264.0675
US \$/ton of CO2	6.00

ECONOMICS OF GENERATION

26.75% CF

Annual energy Generation	7031018	
Total Project Cost	162500000	
Loan	89375000	
Interest on loan reducing balance	13.50%	
Net Energy Generated after wheeling charge	6890398	
Loan repayment years	10	
Project lifetime	20	
Interest on working capital	16.00%	
Discount rate	12.00%	
Buy back rate	3.50	
Annual inflation on buy back	5.00%	NPV
Corporate tax	38.50%	IRR
Return on Equity	16.00%	Cost of gen
Commissioning date	01/04/??	

106 lacs

14.56%

4.03

Life cycle analysis of coal based power plant

MAJOR ASSUMPTIONS

IDC COSTS HAVE BEEN CONSIDERED

All the capital cost is provided by the investor(100% equity)

38000 Rs/KW THIS INCLUDES THE FOLLOWING:

DIRECT AND INDIRECT COSTS

3% PHYSICAL CONTENGENCIES

7.5% CONSTRUCTION OVERHEAD

TRAINING OF O&M STAFF

8 Depreciation,years

4 Duration of construction

16 Cost of capital,(%)

16 Return on equity(%)

12 Discount Rate(%)

210 Capacity of Power plant, MW

7980000000 Capital cost without IDC, Rs

1995000000 Expenditure incurred per year without IDC

2314200000 Capital investment in the first year with IDC

2633400000 Capital investment in the second year with IDC

2952600000 Capital investment in the third year with IDC

3271800000 Capital investment in the fourth year with IDC

11172000000 Total capital expenditure with IDC

1787520000 Return on equity per annum,Rs

1396500000 Depreciation per year
 2500 Heat Rate,(Kcal/kWh)
 4000 Calorific value of coal (Kcal/kg)
 0.68 Plant load factor
 8.5 Auxillary power consumption
 0.63 KG OF COAL /KWH
1250928000 Number of units generated per year
106328880 Auxillary Power Generated per year
1144599120 Number of units sold to the grid
781830000 Tons of coal consumed per year
 0.46 Carbon Content of coal(Kg/Kg of coal)
 1.05 Carbon dioxide generated per kWh from caol
 0.01 Carbon dioxide generated per kWh from fuel oil
 1.06 Total Carbon dioxide per kWh
1330967586 Total carbon dioxide generated per year
 1.05 Landed cost of the coal(Rs/kg)
820921500 Annual coal expenditure (Rs)
 2.5 O&M cost per year (percentage of the capital cost)
279300000 O&M cost per year, Rs
 3.5 ML/KWH OF FO CONSUMED AS SECONDARY FUEL
 4159336 Annual consumption of fuel oil, litres
 14 Cost of fuel oil per litre,Rs
58230698 Annual cost of fuel oil, Rs
65152500 Inventories,(30 days coal stock) kgs
68410125 Cost of inventories,Rs
10945620 Interest on inventories(Working capital), Rs per annum

Life cycle analysis of coal based power plant

1 YEARS	1	2	3
2 Capital investment	2314200000	2633400000	2952600000
3 Variable cost			
Coal			
Fuel oil			
4 Fixed Cost			
O&M cost			
Depreciation			
Interest on working capital			
Return on equity			
5 Total Cost	2314200000	2633400000	2952600000
6 NPV of total cost @12%	30683997039		
7 Number of Units sold to the grid (kWh)			
8 NPV of total Units sold to the grid @12%	10121849246		
9 Cost of generation Rs/kWh	3.03		
10 Carbon Dioxide Generated			
11 NPV of Carbon dioxide generated @12%	11769931513		

4	5	6	7	8	9
3271800000					
	781830000 58230698	781830000 58230698	781830000 58230698	781830000 58230698	781830000 58230698
	279300000 1396500000 10945620 1787520000	279300000 1396500000 10945620 1787520000	279300000 1396500000 10945620 1787520000	279300000 1396500000 10945620 1787520000	279300000 1396500000 10945620 1787520000
3271800000	4314326318	4314326318	4314326318	4314326318	4314326318
	1144599120	1144599120	1144599120	1144599120	1144599120
	1330967586	1330967586	1330967586	1330967586	1330967586

1

1.25093E+14
4159335.6
#REF!
0

#REF!

10	11	12	13	14	15
781830000	781830000	781830000	781830000	781830000	781830000
58230698	58230698	58230698	58230698	58230698	58230698
279300000	279300000	279300000	279300000	279300000	279300000
1396500000	1396500000	1396500000	10945620	10945620	10945620
10945620	10945620	10945620	1787520000	1787520000	1787520000
1787520000	1787520000	1787520000			
			2917826318	2917826318	2917826318
4314326318	4314326318	4314326318			
1144599120	1144599120	1144599120	1144599120	1144599120	1144599120
1330967586	1330967586	1330967586	1330967586	1330967586	1330967586

16	17	18	19	20	21
781830000 58230698	781830000 58230698	781830000 58230698	781830000 58230698	781830000 58230698	781830000 58230698
279300000 10945620 1787520000	279300000 10945620 1787520000	279300000 10945620 1787520000	279300000 10945620 1787520000	279300000 10945620 1787520000	279300000 10945620 1787520000
2917826318	2917826318	2917826318	2917826318	2917826318	2917826318
1144599120	1144599120	1144599120	1144599120	1144599120	1144599120
1330967586	1330967586	1330967586	1330967586	1330967586	1330967586

22	23	24	25	26	27
781830000	781830000	781830000	781830000	781830000	781830000
58230698	58230698	58230698	58230698	58230698	58230698
279300000	279300000	279300000	279300000	279300000	279300000
10945620	10945620	10945620	10945620	10945620	10945620
1787520000	1787520000	1787520000	1787520000	1787520000	1787520000
2917826318	2917826318	2917826318	2917826318	2917826318	2917826318
1144599120	1144599120	1144599120	1144599120	1144599120	1144599120
1330967586	1330967586	1330967586	1330967586	1330967586	1330967586

28	29	30
781830000	781830000	781830000
58230698	58230698	58230698
279300000	279300000	279300000
10945620	10945620	10945620
1787520000	1787520000	1787520000
2917826318	2917826318	2917826318
1144599120	1144599120	1144599120
1330967586	1330967586	1330967586